IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NCR Docket No. 8806

Application of:

Perry G. Vincent   Group Art Unit: 3623

Serial No. 09/750,948   Examiner: Susanna M. Meinecke

Diaz

Filed: December 28, 2000

For: SYSTEM AND METHOD FOR SUGGESTING INTERACTION STRATEGIES
        TO A CUSTOMER SERVICE REPRESENTATIVE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF TRANSMITTAL LETTER

Sir:

Transmitted herewith for filing is an Appeal Brief to the Final Rejection dated
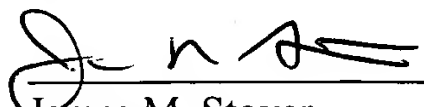January 4, 2006.

☒ Please charge Deposit Account No. 14 0225 for the Appeal Brief fee or any other

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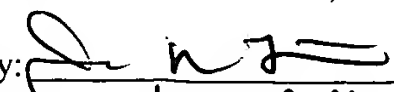01 FC:1402   500.00 DA

Respectfully submitted,

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CERTIFICATION OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as
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By: _____
Name: JAMES M. STOVER

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Dayton, Ohio

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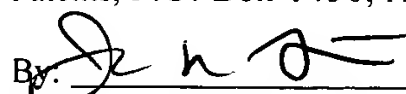Alexandria, VA 22313-1450

BRIEF ON APPEAL

Sir:

This is an appeal under 37 CFR 41.3 to the Board of Patent Appeals and
Interferences of the United States Patent and Trademark Office from the final
rejection of claims 1 and 4-20 of the above-identified patent application. The
claims were finally rejected in an Office Action dated January 4, 2006.

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(1) REAL PARTY IN INTEREST

The present application is assigned to NCR Corporation.

(2) RELATED APPEALS AND INTERFERENCES

There are currently no known active appeals or interferences related to the present application. A Notice of Panel Decision from Pre-Appeal Review was issued on May 2, 2006 requesting the filing of this Appeal Brief.

(3) STATUS OF CLAIMS

Claims 1 and 4-20 are pending in the application.

Claims 1, 4-6 and 9 stand rejected under 35 U.S.C. §102(b) as being anticipated by the publication titled "Net Perceptions Alters Dynamics of Marketing Industry with introduction of Net Perceptions for Call Centers."

Claims 7, 8 and 10-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Net Perceptions Publication in view of Andrews, "A Hidden Agenda."

The rejections of claims 1 and 4-20 are being appealed. Claims 1 and 4-20 are shown in the Appendix attached to this Appeal Brief

(4) STATUS OF AMENDMENTS

A response to the Final Rejection dated January 4, 2006 has not been filed. A Pre-Appeal Brief Request for Review was filed on April 4, 2006. A Notice of Panel Decision from Pre-Appeal Review was issued on May 2, 2006 requesting the filing of this Appeal Brief.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. §41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Independent claim 1 recites a method of suggesting an interaction strategy to a customer service representative (Fig. 1:34, Spec., p. 9, lines 17-19) in a customer relationship management environment (Fig. 1:10, Spec. p. 6-11), said method comprising the steps of:

maintaining an interaction repository containing customer data (Fig. 1:24, Spec., p. 6, line 27 through p. 7, line 7);

utilizing one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns and generate a set of rules based upon said patterns (Fig. 1:26, Spec., p. 7, line 8 through p. 9, line 6); and

using a recommendation engine to apply said rules to a current customer interaction to recognize one or more of said patterns in said interaction and suggest an interaction strategy corresponding to said recognized patterns (Figs. 1:50, 3:64, and 3:66, Spec. p. 10, line 7 through p. 11, line 28, and p. 12, lines 5-9).

Independent claim 11 recites a system for recommending a strategy for managing a customer interaction (Fig. 1:10, Spec. p. 6-11), said system comprising:

a plurality of interaction channels for capturing customer data (Fig. 1, 12-22, Spec., p. 6, line 27 through p. 7, line 7);

one or more data analysis tools comprising executable instructions for analyzing said customer data from said plurality of channels and determining one or more patterns from said data (Fig. 1:26, Spec., p. 7, line 8 through p. 9, line 6); and

a recommendation engine for analyzing a current customer interaction and recognizing one or more of said patterns in said interaction, said recommendation engine recommending strategies corresponding to said recognized patterns (Fig. 1:50, Spec. p. 10, line 7 through p. 11, line 28).

Independent claim 16 recites a method of suggesting an interaction strategy to a customer service representative (Fig. 1:34, Spec., p. 9, lines 17-19) in an automated customer relationship management environment (Fig. 1:10, Spec. p. 6-11), said method comprising the steps of:

storing customer data from a plurality of different interaction sources in an interaction repository (Fig. 1:12-24, Spec., p. 6, line 27 through p. 7, line 7);

utilizing one or more data analysis tools comprising executable instructions to analyze said said customer data to determine one or more patterns (Fig. 1:26, Spec., p. 7, line 8 through p. 9, line 6); and

using a recommendation engine to detect affinities between a current customer interaction and said patterns and recommend an interaction strategy based on any detected affinities (Figs. 1:50, 3:64, and 3:66, Spec. p. 10, line 7 through p. 11, line 28, and p. 12, lines 5-9).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 4-6 and 9 were properly rejected under 35 U.S.C. §102(b) as being anticipated by the publication titled "Net Perceptions Alters Dynamics of Marketing Industry with introduction of Net Perceptions for Call Centers."

Whether claims 7, 8 and 10-20 were properly rejected under 35 U.S.C. §103(a) as being unpatentable over the Net Perceptions Publication in view of Andrews, "A Hidden Agenda."

(7) ARGUMENT

35 U.S.C. §102(b) Rejection of Claims 1, 4-6 and 9

The rejection of claims 1, 4-6 and 9 under 35 U.S.C. §102(b) as being clearly anticipated by the publication titled "Net Perceptions Alters Dynamics of Marketing Industry with introduction of Net Perceptions for Call Centers" is respectfully traversed.

Claim 1 recites a method of suggesting an interaction strategy to a customer service representative in a customer relationship management environment, said method comprising the steps of (1) maintaining an interaction repository containing customer data; (2) utilizing one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns and generate a set of rules based upon said patterns; and (3) using a recommendation engine to apply said rules to a current customer interaction to recognize one or more of said patterns in said interaction and suggest an interaction strategy corresponding to said recognized patterns.

The Net Perceptions Publication discloses pooling information from current and previous customer calls, drawing information from a database of customer information, and use of a recommendation engine in call center applications. It is not seen, however, that the Net Perceptions Publication teaches "one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns and generate a set of rules based upon said patterns" as part of the Net Perceptions call center solution.

Accordingly it is believed that claim 1, as well as claims 4-6 and 9 which depend from claim 1, are patentable over the cited Net Perceptions Publication.

35 U.S.C. §103(a) Rejection of Claims 7, 8 and 10-20

The rejection of claims 7, 8 and 10-20 under 35 U.S.C. §103(a) as being unpatentable over the Net Perceptions Publication in view of Andrews, "A Hidden Agenda" is respectfully traversed.

Method claims 7, 8 and 10, which depend from claim 1, each include the step of "utilizing one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns and generate a set of rules based upon said patterns." Method claims 16 through 20 each include the step of "utilizing one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns." It is not seen that the Net Perceptions Publication or Andrews, taken singularly or in combination, teaches "one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns."
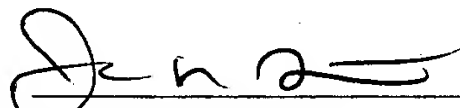
Each one of claims 11 through 15 of the present application recites a system which includes, among other elements, "one or more data analysis tools comprising executable instructions for analyzing said customer data from said plurality of channels and determining one or more patterns from said data."

Neither the Net Perceptions Publication or Andrews, taken singularly or in combination, teaches "one or more data analysis tools comprising executable instructions for analyzing said customer data from said plurality of channels and determining one or more patterns from said data," an element of each one of claims 11 through 15.

For the reasons stated above, it is believed that claim 7, 8, and 10-20 are patentable over the cited references.

Review of the present application and claims with consideration of the foregoing comments, and reconsideration of the rejection of claims 1 and 4 through 20, are respectfully requested.

Respectfully submitted,

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(8) CLAIMS APPENDIX

1. (previously presented) A method of suggesting an interaction strategy to a customer service representative in a customer relationship management environment, said method comprising the steps of:

maintaining an interaction repository containing customer data;

utilizing one or more data analysis tools comprising executable instructions to analyze said customer data to determine one or more patterns and generate a set of rules based upon said patterns; and

using a recommendation engine to apply said rules to a current customer interaction to recognize one or more of said patterns in said interaction and suggest an interaction strategy corresponding to said recognized patterns.

2. (canceled)

3. (canceled)

4. (previously presented) The method of claim 1, wherein said recommendation engine recognizes said patterns from said current customer interaction in real-time.

5. (original) The method of claim 1, wherein said customer data includes a customer interaction history with said business.

6. (original) The method of claim 1, wherein said patterns are individually determined for customers of said business.

7. (original) The method of claim 1, further comprising the step of capturing said customer data from a plurality of different interaction data sources.

8. (original) The method of claim 7, wherein said interaction channels are both virtual and physical.

9. (original) The method of claim 1, wherein said current customer interaction is a telephone contact with a call center representative.

10. (original) The method of claim 1, wherein said current customer interaction is through a self-service application.

11. (original) A system for recommending a strategy for managing a customer interaction, said system comprising:

a plurality of interaction channels for capturing customer data;

one or more data analysis tools comprising executable instructions for analyzing said customer data from said plurality of channels and determining one or more patterns from said data; and

a recommendation engine for analyzing a current customer interaction and recognizing one or more of said patterns in said interaction, said recommendation engine recommending strategies corresponding to said recognized patterns.

12. (original) The system of claim 11, further comprising an interaction management application for directing said customer interaction, said application including a user interface for inputting data regarding said current interaction.

13. (original) The system of claim 12, wherein said user interface includes a first display panel for inputting notes regarding said interaction and a second display panel for displaying recommended strategies from said recommendation engine.

14. (original) The system of claim 13, wherein said recommendation engine uses said interaction notes to determine said recommended strategies.

15. (original) The system of claim 11, further comprising a configuration tool for developing scripts corresponding to said recommended strategies.

16. (previously presented) A method of suggesting an interaction strategy to a customer service representative in an automated customer relationship management environment, said method comprising the steps of:

storing customer data from a plurality of different interaction sources in an interaction repository;

utilizing one or more data analysis tools comprising executable instructions to analyze said said customer data to determine one or more patterns; and

using a recommendation engine to detect affinities between a current customer interaction and said patterns and recommend an interaction strategy based on any detected affinities.

17. (original) The method of claim 16, wherein said recommendation engine detects said affinities and recommends said interaction strategies in real-time.

18. (original) The method of claim 17, wherein said recommendation uses a context of the current customer interaction to detect affinities to said patterns.

19. (original) The method of claim 17, further comprising the step of inputting information from the current customer interaction and using said input information to detect affinities to said patterns.

20. (original) The method of claim 16, wherein said patterns include customer product ownership, customer interaction history, customer interaction behavior, and product affinities.

(9) EVIDENCE APPENDIX

Not applicable

(10) RELATED PROCEEDINGS APPENDIX

Not applicable